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# MidTerm Overall Evaluation Report



**PROPOSAL: 2000000131**

**TITLE: Internet Enabled Aviation Neuropsychological Assessment**

## ACCOMPLISHMENTS

**SEP00...**Submitted research protocol to WRAMC DCI.

**NOV00...**Protocol approved by WRAMC DCI Human Use Committee.

**JAN01...**Project funded by TATRC.

**FEB01...**CIRO approval.

**APR01...**WRAMC DCI and MRMC final approval to begin data collection.

**APR01...**NHQ-AE, ANAM2001 (ACAT version) and SynWin programming completed with software parameters set for study.

**MAY01...**Created the Army's first Clinical Neuropsychology Website.

**MAY15...**Web-enabled ANAM and SynWin.

**JUN01...**Ran first subject through research protocol at Fort Campbell, KY.

**JUL01...**Problems encountered with SynWin with the 1st subject required programming adjustments to the test.

**JUL16...**Recommendations by the 1st subject led to revising the NHQ-AE to add more data fields would yield more valuable results. **AUG01...**Beta testing of the new NHQ-AE was conducted at it was found to perform well.

**AUG17...**CONFERENCE PANNEL PRESENTATION: Gahm, G., Christensen, D., Baggett, M., and Reeves, D. Army Neuropsychology - Current Applications of the ANAM. US Army Behavioral Science Postgraduate Short Course; Behavioral Health Teams: Managing in the New Army, Hyatt Regency Bethesda, MD, 13 August-17 August 2001.

**SEP01...**The second subject was successfully run through the study at Ft. Campbell.

**OCT01...**The system was reviewed by the PI and AI's and it appeared to function as designed.

**NOV01...**Eleven more subjects were run through the study.

**NOV30...**CONFERENCE POSTER PRESENTATION USING ANAM from our clinical neuropsychology website. Baggett, M., Kelly, M., & Ryan, L. Neuropsychological Deficits of a U.S. Army Pilot Following an Anoxic Event. Presented to the National Academy of Neuropsychology Conference, San Francisco, CA, 2001.

**DEC01...**Data from all 13 subjects was complete. **FEB02...**CONFERENCE POSTER PRESENTATION PLANNED: Baggett, M., Kelly, M., Christensen, D., Gahm, G., Kane, R., Via, J. and Ingram, V. Internet Enabled Neuropsychological Assessment. Accepted to the International Neuropsychological Society, Toronto, Canada, 2002.

**PI's Accomplishment Evaluation: : Project Accomplishments Match Proposal**

## PROBLEMS

Problems were encountered with SynWin with the 1st subject required programming adjustments to the test.

PI's Problem Area Evaluation: : Project encountered no significant problems/issues

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## LIFE-CYCLE

1. Complete research project gathering all data at Fort Campbell, KY through our web enabled neuropsychological assessment with a total of 100 subjects.
2. Examine convergent validity of ANAM, SynWin and CogScreen to evaluate the interchangeability of these measures.
3. Examining predictive validity of ANAM, SynWin and CogScreen to predict flight performance based on NHQ-AE criterion measures of flight performance.

PI's Life-Cycle Evaluation: : Project encountered no significant problems/issues

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## DELIVERABLES

1. We completed the development of functioning website titled "US Army Neuropsychology" URL: <https://consult.wramc.amedd.army.mil/neuropsych/index4.cfm>. This website serves as the system for electronic (collection and transmission of neuropsychology data.
2. We completed development of a functioning on-line questionnaire titled "Neuropsychology History Questionnaire- Aeromedical Edition (NHQ-AE)." This on-line questionnaire was developed from the originally proposed hard-copy questionnaire to further enhance the telemedicine aspect of the project.
3. We completed development of a functioning computerized neuropsychological test battery derived from ANAM2001 titled "US Army-Aeromedical Cognitive Assessment Tool (USA-ACAT)," and the ability to download the test to a remote computer. Logical analysis of the entire ANAM2001 library of tests, including comparisons to other existing ANAM-derived batteries. This included examination of the Space Cognitive Assessment Test (SCAT) used by NASA and the concussion battery used by the National Rehabilitation Hospital. USA-ACAT was developed as an SCAT+ battery with the ANAM testes used by NASA included and set to SCAT parameters. ANAM-Concussion battery testes were set to those concussion parameters. In doing this we built USA-ACAT on the basis of two bodies of research available using ANAM subtests. 4. We completed the development of a database system using a Microsoft SQL7 secure server. We internet enabled the NHQ-AE and USA-ACAT to this secure server. We can now access these neuropsychological tests and data in a password-protected web-enabled environment which is maintained on a secure server.

PI's Deliverables Evaluation: : Deliverable is on schedule per Proposal

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## Expenditures

Element of Resource (EOR)	1ST Quarter Oct 1 - Dec 31	2nd Quarter Jan 1 - Mar 31
Travel 2100	\$665.02	\$8,482.00
Shipping 2200	\$0.00	\$0.00
Rent & Communications 2200	\$0.00	\$0.00
Contract for Services 2500	\$5,000.00	\$30,507.98
Supplies 2600	\$5,345.00	\$0.00
Equipment 3100	\$0.00	\$0.00

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### Financial Narrative:

Budget allocations match the initial protocol.

PI's Financial Evaluation: : Deliverable is on schedule per Proposal

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**\* END OF REPORT \***